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DIALOG(R)File 352:Derwent WPI

009730228
WPI Acc No: 1994-010078/199402
XRAM Acc No: C94-004096
Purificn. of acetic acid and acetic anhydride - by contact with ozone and distn. of the prod. mixt. to remove methyl crotonate and vinyl acetate impurities
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Number of Countries: 008 Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 578193	A1	19940112	EP 93110769	A	19930706	199402	B
JP 6025071	A	19940201	JP 92179903	A	19920707	199409	
US 5362365	A	19941108	US 9388035	A	19930706	199444	
CN 1085539	A	19940420	CN 93108242	A	19930707	199527	
TW 247312	A	19950511	TW 93105057	A	19930625	199530	
EP 578193	B1	19961009	EP 93110769	A	19930706	199645	
DE 69305254	E	19961114	DE 605254	A	19930706	199651	
			EP 93110769	A	19930706		
KR 132405	B1	19980413	KR 9312748	A	19930707	200011	

Priority Applications (No Type Date): JP 92179903 A 19920707
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 578193	A1	E	9	C07C-053/08	
Designated States (Regional): DE FR GB					
JP 6025071	A		4	C07C-051/487	
US 5362365	A		7	B01D-003/34	
EP 578193	B1	E	10	C07C-053/08	
Designated States (Regional): DE FR GB					
DE 69305254	E			C07C-053/08	Based on patent EP 578193
KR 132405	B1			C07C-053/08	
CN 1085539	A			C07C-051/44	
TW 247312	A			C07C-051/42	

Abstract (Basic): EP 578193 A

Purificn. of acetic acid and/or acetic anhydride contg. methyl crotonate and/or vinyl acetate as impurities, comprises: a) contacting the mixt. with O3; and b) distn. of the prod..

Pref. the acetic acid and/or acetic anhydride is produced, using a catalyst comprising an Rh component and a methyl halide, by reacting CO with: (1) MeOH and/or methyl acetate, (2) MeOH and/or dimethyl ether. The mixt. to be purified is fed to the middle or upper section of the distn. column and a low-boiling impurity fraction is recovered from the top of the column. The distn. column height is Hd, the feed height from the base of the column is Hi and the height to the recovery pt. is Hr, such that the ratios are Hi/Hd = 50-80% and Hr/Hd = 0-40%. The column contains 20-80 trays and the low-boiling impurity fraction is partly recovered from the top of the column, with the remaining overhead liq. being returned as reflux; purified acetic acid and/or acetic anhydride being recovered as vapour from the 1st-5th plate from the bottom; and a high-boiling fraction impurity being recovered from the bottom of the column.

USE/ADVANTAGE - The process can be used to purify the desired prods. simultaneously or separately on a commercial scale. The impurities which are difficult to remove by conventional techniques are eliminated to give high quality prods. having excellent residence time in the potassium permanganate (''chameleon'') test. The process is simple to perform is economical, safe and effective even for large amts. of impurities.

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